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Japan's Economy Up Sharply In 1988

Japan's economy never stops surprising. Following on the heels of 4.5 percent growth in 1987, Japan's gross national product notched another outstanding year in 1988 with inflation-adjusted growth of 5.7 percent, the highest since 1973. The just-released figure -- which came close to estimates made late last year -- was enough to give Japan the highest growth rate among the major industrialized countries and came in far ahead of the 3.8 percent rate registered by the United States.

The latest data also suggested that Japan again had the highest per capita GNP among the seven largest industrial countries when national economies are compared at current exchange rates. Japan's figure came to \$23,400 compared to \$19,800 for the United States when the 1988 average exchange rate of Y128.2=\$1.00 is used. However, both Japanese and U.S. analysts note that if the figures are adjusted for the cost of living in each country, the United States would come out ahead of Japan.

For the third year in a row, growth in Japan was achieved without depending on an expansion of real net exports. While exports adjusted for inflation rose 7.9 percent in 1988, import growth was far faster at 21.2 percent. As

a result, the external sector shaved 1.9 percentage points off the overall growth rate. Without the negative impact of the external sector, the economy would have grown 7.6 percent in real terms.

While the year as a whole showed a strong performance, the economy appeared to limp home in the final stretch. Growth in the October-December quarter came to merely 3 percent annualized, below expectations. The pattern of growth in the final quarter was striking. Consumer spending -- the giant of the economy in that it accounted for about 55 percent of total GNP -- had been expected to carry an ever-increasing share of total growth as the expansion completed its second year. Instead, it was virtually flat in the quarter, rising at only a 0.1 percent annual rate. Analysts blamed the subdued public mood surrounding the late emperor's illness, which lasted throughout the quarter, and the diminishing impact of asset appreciation, which had increased spending in previous quarters as consumers who owned rapidly appreciating land and stocks raised their spending. In addition, durable goods expenditures, an important component of consumer spending, may have been weak because consumers were waiting for the abolition of the commodity tax as part of the tax reform that takes effect April 1.

With consumer spending so weak, the burden of carrying the economy forward fell to private plant and investment spending, which surged an annualized 12.6 percent over its already high levels in the previous quarter. In addition, overall economic growth got a boost from an unanticipated source -- housing expenditures, which jumped an annualized 24.4 percent to the highest recorded value ever in inflation-adjusted terms. Expectations for a weak housing sector had been broad, with many analysts expecting a fall. In fact, the number of housing starts was below the year-earlier level during the quarter. Analysts attributed the discrepancy to upgrades in the quality of housing. Housing together with plant and equipment investment more than accounted for the total growth recorded in the quarter.

In contrast to its negative impact over 1988 as a whole, the foreign sector during the last quarter was close to a neutral factor on the growth rate. Both exports and imports showed modest increases. The combined contribution to GNP growth was slightly negative, primarily because of increased income from foreign investments in Japan, which counts as an import.

Should the pattern of stagnant consumer spending and soaring capital spending continue, the neutral effect of the external sector is unlikely to persist. In this situation, a sizable chunk of the output resulting from the extra capacity could end up as exports, which, in turn, would boost the overall growth rate. To the extent that manufacturing firms shift plant and investment spending away from upgrading existing facilities -- the emphasis during the past year -- to increasing capacity this effect would be larger.

Economists found good news and bad news in the fourth quarter figures. Overall growth was disappointing. And, should consumer spending remain weak, real doubts would be raised about the ability of the economy to reach expected levels in the fiscal year that begins April 1 (see JEI Report No. 9A, March 3, 1989). The Economic Planning Agency believes the weakness in consumer spending is temporary. But even the bad news on consumer spending in the latest report could have been worse. Analysts at Mitsui Bank, Ltd. point out, for example, that the lower-than-expected figures should reduce mounting concerns about inflationary pressure (see JEI Report No. 10B, March 10, 1989).

Japan's Real Gross National Product at Constant (1980) Prices

(in billions of yen, seasonally adjusted, quarterly totals and rates of growth at annual rates)

	1987	1988	January- March 1988	April-June 1988	July- September 1988	October- December 1988
Gross National Product	Y312,370.1 (4.5%)	Y330,098.4 (5.7%)	Y327,750.6 (10.1%)	Y324,982.8 (-3.3%)	Y332,443.8 (9.5%)	Y334,870.2 (3.0%)
Personal Consumption Spending	174,353.6 (4.2%)	183,105.7 (5.0%)	180,839.0 (9.0%)	182,010.8 (2.6%)	184,590.0 (5.8%)	184,620.7 (0.1%)
Private Residential Construction	18,500.5 (22.2%)	20,984.2 (13.4%)	21,541.1 (7.7%)	19,682.3 (-30.3%)	20,854.4 (26.0%)	22,024.7 (24.4%)
Private Fixed Nonresidential Investment	59,911.6 (8.0%)	69,446.6 (15.9%)	65,130.8 (17.2%)	68,143.0 (19.8%)	71,021.6 (18.0%)	73,160.8 (12.6%)
Change in Business Inventories	962.9 (-33.7%)	1,798.3 (86.8%)	1,438.7 (*)	2,043.0 (*)	2,093.0 (*)	1,622.3 (*)
Government Current Expenditures	28,480.3 (-0.7%)	29,091.6 (2.1%)	28,835.0 (3.8%)	28,990.9 (2.2%)	29,184.4 (2.7%)	29,369.5 (2.6%)
Government Fixed Investment	23,602.7 (8.0%)	25,144.9 (6.5%)	25,809.5 (16.8%)	25,189.5 (-9.3%)	24,734.6 (-7.0%)	24,892.7 (2.6%)
Change in Government Inventories	23.3 (*)	-152.1 (*)	415.9 (*)	119.5 (*)	-225.9 (*)	-916.2 (*)
Net External Sector	6,535.3 (-21.7%)	679.4 (-89.6%)	3,740.6 (-45.3%)	-1,196.2 (*)	191.7 (*)	95.7 (-93.8%)
Exports of Goods and Services and Factor Income Received	54,415.1 (3.8%)	58,732.2 (7.9%)	57,573.7 (14.4%)	55,377.6 (-14.4%)	60,994.6 (47.2%)	61,074.4 (0.5%)
Imports of Goods and Services and Factor Income Paid	47,879.8 (8.7%)	58,052.8 (21.2%)	53,833.1 (21.1%)	56,573.8 (22.0%)	60,802.9 (33.4%)	60,978.7 (1.2%)

*Cannot be calculated or meaningless.

Source: Economic Planning Agency

Nevertheless, the Bank of Japan, which has sounded the alarm repeatedly on inflation, turned up the volume a little in a warning released the same day as the GNP figures. In BOJ's view, events in early 1989 pose a triple threat to price stability. The yen has weakened in recent weeks, oil prices are rising, and the new consumption tax will give a one-shot boost to the price level. The latest GNP figures give some support to the BOJ argument: the GNP deflator, a broad measure of inflationary trends, has risen in each of the past four quarters, although it still is running at less than 1 percent per year.

The latest quarterly data leave uncertain the prospect for achieving the government's estimated 4.9 percent real growth in fiscal year 1988, which ends March 31. If growth continues at the same rate as in the October-December quarter, the overall growth rate will be less than the forecast figure for FY 1988. If, however, GNP expands at the average pace of the past four quarters, the FY 1988 rate will come to exactly 4.9 percent.

Douglas Ostrom

Japan's Savings Balances Hit Record Level

Japanese thrift is legendary. Washington policymakers spend countless hours trying to figure out ways to get U.S. households to emulate their Japanese counterparts. Advocates of higher savings in America typically compare household savings as a percentage of disposable income in the two countries. In recent years this figure has varied between 16 and 17 percent in Japan -- about four times the U.S. figure, according to the Organization for Economic Cooperation and Development.

With Japan's savings rate remaining high year after year, savings balances now have reached remarkably high levels (see Table). Recently released Japanese data show that in 1988 Japanese worker households had average savings of ¥8.9 million (\$69,665 at 1988's average exchange rate of ¥128.2=\$1.00), which came to 1.44 times average annual income. (The worker households in the survey averaged about four members each.) Despite talk that Japanese consumers are going on a spending spree, this figure actually was higher than the figure of 1.35 recorded in 1987.

Average Savings Level of Japanese Worker Households, 1988

(as of December 31)

	Amount (thousands of yen)	Change from 1987
Demand Deposits	¥646	9.9%
Time Deposits	3,623	5.8
Life Insurance	2,326	15.0
Securities	1,919	6.7
Stocks	976	3.1
Other Securities	943	10.6
Outside Financial Institutions	418	17.1
Total	8,931	9.0

Source: Management and Coordination Agency

Of course, when viewed as a percentage of income, rising liabilities might offset higher asset levels, as was the case in previous years when the two series rose almost in tandem. However, in 1988 assets increased while liabilities shrank, making the growth in assets all the more significant. While household financial assets were up 9 percent, financial liabilities declined 2.1 percent. In 1988, 91.7 percent of household liabilities were in the form of housing and land loans, which averaged ¥2.5 million (\$19,500) per worker household, a decline of 0.5 percent from 1987. Analysts attributed the drop to the decreased affordability of housing in light of the recent rise in land prices.

Over the longer term, where both liabilities and assets have risen as a percentage of income, the figures reflect the increasing sophistication of Japanese financial institutions. While some analysts have pointed to increased borrowing by Japanese households as evidence that the savings ethic is withering away, the long-term data suggest that greater borrowing on the part of some households has been offset with more savings by others. More efficient financial institutions have intermediated these interhousehold financial transactions.

As savings balances have risen, their composition has changed. In 1988 the biggest gainer was life insurance, which jumped 15 percent. This relatively rapid growth reflected the continued advantageous tax status of insurance policies in comparison to other savings vehicles that lost their tax-free status with the abolition of the maruyu system April 1, 1988. But time deposits, among the big losers in tax reform, still managed a modest 5.8 percent gain.

The figures suggest that Japanese households remain relatively cautious about spending after two full years of vigorous economic expansion (see preceding article). How Japanese households plan to use this huge stash of funds is unclear. Obviously, the savings now are sufficient for rainy days of more than Biblical duration. And, while Japan's population is aging, an increasing number of experts believe that the elderly will not run their savings down significantly, especially in light of substantial improvements to pension programs in recent years. Instead, the elderly may be planning a bequest for their heirs. The minority of the sample households who do not now own a home may be saving in part because they cling to a hope that they eventually will be able to afford one.

The data underscore the ability of Japanese consumers to increase their spending quickly, should they feel the urge, because of increased wealth. Rising stock and land prices have received credit for boosting consumer spending in Japan, an action made easier by the high levels of liquid financial assets shown in the table.

With little sign that Japanese savings rates are falling significantly, savings balances are likely to keep climbing steadily. One interesting question for the coming years is likely to be how the Japanese household financial planner will allocate her growing portfolio. (In many Japanese households housewives make the key investment decisions.) Yet, Japanese households have fewer investment and savings choices, despite ongoing deregulation, than their American counterparts. As these choices slowly widen, competition among Japanese -- and foreign -- financial institutions for this enormous pool of savings is likely to intensify.

Douglas Ostrom

- A wholly owned subsidiary system - Banks and securities firms would compete in the other's market through wholly owned subsidiaries. Unlike the previous option, the parent corporation could become entangled in the financial difficulties of its subsidiary. This is modeled after the Canadian deregulation of 1987.

- An investment bank subsidiary system - Banks and brokers would be allowed to establish a wholly owned investment bank subsidiary offering commercial and investment services to large institutional clients only.

- Modest modifications to the existing system - The present system would be preserved with the addition of very specific and limited channels for banks and securities companies to compete in each others' markets.

The first and last options have been practically ruled out by the expert panel. Universal banking could lead to undesirable consequences, according to panel head Ryuichiro Tachi of Tokyo University. Large commercial banks with their extensive network of offices could dominate the brokerage business, he argues, while the government could face added liability if it guarantees savings deposits handled by securities companies. (Government guarantees currently apply only to deposits at banks.) At the other end of the spectrum, keeping the current system with specific modifications is considered unrealistic given the recent activities of financial firms. As indicated earlier, Japanese banks and brokers are looking actively for or exploiting gray areas in the existing law. Professor Tachi is worried that if the erosion of the law by private firms is allowed to continue unchecked, Japan's financial markets could not only become disorderly but less transparent to foreign firms. If Tokyo is to become a global money center, he contends, the rules must be transparent to foreign and domestic firms alike and operate in line with global practices.

Behind-the-scenes talks and debate therefore are focusing on the three remaining options. MOF is concerned about moving too fast, however. With the European Community drafting new communitywide financial rules in preparation for its 1992 unification program and the United States still undecided about how to revise the Glass-Steagall Act, Japan could find itself out of step if it moves in the wrong direction. MOF realizes, however, that reforming Article 65 will be very difficult and time-consuming; the multitude of interests to be balanced ensures this.

Jon Choy

Who's On First In R&D?

One indicator of the intensity of the technological competition between Japan and the United States is how highly each side regards the other. By this measure a recent American report and a Japanese newspaper survey indicate that the competition is indeed intense. Mutual congratulatory exercises aside, both Tokyo and Washington are focusing funds on areas of perceived weakness or criticality.

Japan's leading economic daily, the Nihon Keizai Shimbun, recently surveyed more than 300 Japanese scientists and researchers from business, academia and research centers and asked them to rank Japan, the United States and Europe in 47 areas of basic, precommercial and commercial technology. The results go against the commonly held idea that Japan is winning the technological race.

Japan was ranked first in only two of the 47 fields (see Table). Moreover, the respondents felt that Japan would pull ahead of the United States in just seven other fields by the start of the next century.

U.S. scientists responded to the study's results with skepticism, pointing out that while the United States may be ahead in basic research, Japan leads in commercializing new technologies. The Japanese respondents also may have been too deprecatory in their evaluation. In response to other questions, however, it was clear that they felt Japan was not enjoying a free ride on U.S. and European basic research. In fact, the respondents were overwhelmingly in favor of greater dissemination of Japanese scientific information in Europe and the United States, indicating they felt Japan had much to offer.

On this side of the Pacific, a government-funded report heaps praise on one of Tokyo's more unusual approaches to research, the Exploratory Research for Advanced Technology program. ERATO is unusual for several reasons: the subjects of the five-year grants have been basic science as well as precommercial technology; an interdisciplinary approach to project goals is encouraged; and project leaders have a great deal of freedom in how they use their grant monies, even to the point of employing foreign researchers. According to a report funded by JTECH, a Commerce Department program initiated in 1983 and currently led by the National Science Foundation, ERATO has put Japan at the cutting edge of several areas, such as crystal growth technology and prostaglandin research. "That ERATO can foster this spirit of independence while working within the confines of the existing industrial and university structure I find remarkable," wrote one contributor to the JTECH report.

Despite this praise the Council for Science and Technology, a Japanese government advisory body chaired by the prime minister, recently urged Tokyo to increase its efforts in other areas. The March 14 report calls for a concerted effort on "intelligent" computers that can understand speech, recognize visual patterns, and learn and understand everyday life. The council called for new efforts in hardware but said that software in particular needs greater attention. Although Japan has done well up to now by letting private companies bear the majority of the research and development burden, the report insists that the government must play an ever-increasing role in the future, especially in information technologies and basic research, which derive a large part of their value from broad dissemination.

In Washington the Departments of Defense and Energy presented to the Senate Armed Services Committee March 17 a list of 22 technologies deemed critical to "the long-term qualitative superiority of U.S. weapons systems." In addition to the fields of microelectronics, computer technology, detection and tracking technology, and power plants, the agenda includes advanced structural composite materials, high-temperature superconductivity and biotechnology. The report met criticism from those saying it left out important areas, such as aerospace, and from others who said it lacked details on how to support these "critical" items. The Defense Department said that the list was by no means final, closed or all-inclusive. Given the nature of the congressional mandate that DOD and DOE were trying to meet, the list was the best they could put together for this year. Funding, in particular, is an open question as Congress grapples with the federal budget deficit. It is unquestionable, however, that Japan and the United States will be each other's most formidable competitor in the development and the commercialization of advanced technology.

Jon Choy

Results of a Nihon Keizai Shimbun Survey on Technological Leadership

(rank in field for specified year)

Field	1988			2000		
	United States	Europe	Japan	United States	Europe	Japan
New Industrial Materials						
High-temperature superconductors	1	3	2	1	3	2
Nonlinear optoelectronic materials	1	3	2	1	3	2
Ferromagnetic materials	2	3	1	2	3	1
Molecular functional materials	1	2	2	1	3	2
Durable, advanced composite materials	1	2	2	1	3	2
Alloys and intermetallic compounds	1	3	2	1	3	2
Fine ceramics	1	3	2	2	3	1
Carbon-based materials	1	3	2	1	3	1
Amorphous crystal materials	1	3	2	1	3	2
High-purity fine polymers	1	3	2	1	3	2
Silicon-based materials*	1	3	2	1	3	2
Microelectronic materials	1	3	2	1	3	2
Electronics						
Superconducting devices	1	3	2	1	3	1
Quantum-effect devices	1	3	2	1	3	2
Electronic power devices*	1	3	2	1	3	2
Optical devices	1	3	2	1	3	2
Large circuit devices*	1	5	2	1	3	1
Biotechnology						
High-performance enzymes and biomaterials	1	2	3	1	3	2
Animal and plant cell engineering*	1	2	2	1	3	2
Genetic engineering	1	2	3	1	2	2
Biomaterial databanks	1	2	3	1	2	3
Screening and isolation of genes from all sources*	1	2	3	1	2	3
Bioreactor technology	1	2	3	1	2	2
Atomic-level precision manipulation technology	1	2	2	1	2	2
Fabrication of metals and inorganic substances	1	2	3	1	2	2
Precision molecular alignment technology	1	2	3	1	2	2
Evaluation, analysis and measurement technology	1	2	2	1	2	2
Design and simulation technology	1	3	2	1	3	2
Photoreactive process technology	1	2	2	1	2	2
Processing technology for special environments (such as microgravity and high pressure)	1	2	3	1	2	2
Biomaterials						
Biomimetic materials	1	3	2	1	3	1
Biocompatible materials	1	3	2	1	3	2
Biochemical technology	1	3	2	1	3	2
Bioprocessing	1	2	2	1	2	2
Bioelectronics						
Protein alignment technology	1	2	3	1	2	3
Biomembrane technology	1	2	3	1	2	3
Analysis of bio-related materials	1	2	2	1	3	2
Computer Software and Systems Engineering						
Self-organized data processing systems	1	3	2	1	3	2
Self-organized neural networks	1	2	3	1	2	2
Ultraparallel processing architectures	1	3	2	1	3	2
Integrated mechanical control software	1	3	2	1	3	2
Software development technology	1	3	2	1	3	2
Disaster prevention technology	1	3	2	1	3	1
Environmental control technology	1	3	2	1	3	1
Human-related technology	1	2	2	1	3	2
Resource and energy technology	1	2	3	1	3	2
Robotic technology	2	3	1	2	3	1

*Fields where the newly industrialized economies are making rapid progress.

Source: Reprinted with permission from Japan Economic Journal, March 11, 1989.

Mr. Danforth concedes that the final decision on whether to go ahead with a particular project should rest with the president. But the senator emphasized the need to have input on negotiations from the agencies in touch with business and industry, including the Office of the U.S. Trade Representative.

At JEI press time President Bush gave the FSX project the go-ahead but stated he would seek different terms in several key areas than those outlined in the November 29, 1988 memorandum of understanding. These changes are unlikely to alter the sentiment on Capitol Hill that more emphasis must be given to economic priorities in order to restore U.S. competitiveness worldwide. While it is too early to predict whether the legislative prescriptions will gain enough support to become law, it seems certain that Congress will be lending more of an ear to America's commercial voices.

Gretchen Green

Notes

Televisions - Japan's consumer electronics manufacturers now supply the American color television set market almost entirely from U.S. production facilities. South Korean companies also make an increasing proportion of the color TVs they sell here at onshore plants, a business strategy dictated by the same development that initially prompted a number of Japanese producers to begin domestic assembly operations -- a dumping finding. But these production moves have not ended Zenith Electronics Corp.'s 20-year legal campaign against what it claims is a persistent pattern of unfair trade in television sets. In the latest chapter the last major U.S.-headquartered TV manufacturer charges that Asian competitors subject to antidumping-duty orders are evading the penalty tariffs by shipping into the United States complete and incomplete color TVs, color picture tubes and television parts from plants in third countries.

On February 27 the Department of Commerce disclosed that it would monitor imports of complete and incomplete color television sets from Mexico and Malaysia for up to one year to determine whether there is sufficient evidence of sales at less than fair value to initiate a full-scale antidumping investigation. This action marks the first time Commerce has utilized Section 732 of the 1984 Trade Act, although Zenith's December 30, 1988 request for monitoring was not the first received by the department. The steel industry has tried three times, while makers of brass sheet and strip have a request pending. At the same time, Zenith did not get everything it wanted, which included tracking all color television-related imports from Singapore, Hong Kong, China, Thailand and the Philippines as well as from Mexico and Malaysia.

Section 732 is similar in intent to the anticircumvention language added to U.S. trade law by the 1988 Omnibus Trade and Competitiveness Act (see JEI Report No. 10B, March 10, 1989). The older measure is more difficult to trigger, however. At least two antidumping-duty orders on a product must be outstanding before Commerce can start monitoring imports. Moreover, the department has to have some reason to believe or suspect that "an extraordinary pattern of persistent injurious dumping" is causing serious problems for domestic manufacturers. The antidumping-duty orders on television sets made in Japan (March 1971), South Korea (April 1984) and Taiwan (April 1984) and on color picture tubes sourced from Canada, Japan, Korea and Singapore (January 1988) got Zenith

past the threshold requirement for a monitoring program, and the company evidently supplied Commerce with enough information indicating dumping of Mexican and Malaysian TVs to meet the second test.

U.S. Imports of Complete Color Television Sets, 1984-88

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
<u>Value</u> (millions of dollars)					
Total Imports	\$1,088.2	\$1,030.2	\$1,375.9	\$1,323.2	\$1,230.4
Mexico	0.1	18.2	103.2	233.2	492.7
Taiwan	238.4	255.1	361.6	389.3	259.3
South Korea	280.1	122.1	236.1	236.0	166.6
Malaysia	27.3	40.2	40.9	122.2	95.4
Singapore	33.3	77.9	92.6	75.1	88.6
Japan	429.8	436.9	440.9	184.1	52.2

Volume (thousands of sets)

Total Imports	6,438	8,344	9,446	9,383	7,910
Mexico	2	138	841	1,696	2,706
Taiwan	1,415	1,767	2,697	2,792	1,781
South Korea	1,841	845	1,743	1,812	1,323
Malaysia	199	394	343	967	780
Singapore	205	533	641	494	583
Japan	2,476	4,324	2,719	1,233	448

Source: Department of Commerce

Space Station - While Washington and Tokyo spar over the FSX fighter support aircraft, the two governments are moving ahead on an equally complex project -- the permanently manned space station that the National Aeronautics and Space Administration hopes to have in operation by the end of 1997. In late September 1988 representatives of the United States, Japan, Europe and Canada signed an agreement covering national security use of the station, user allocation, cost sharing, technology transfer and many other contentious areas. In mid-March Japan and the United States initialed a memorandum of understanding on each country's roles and responsibilities in the project.

Japan will retain the use of about 51 percent of its laboratory module, a multipurpose facility for experiments in materials processing and life sciences known as the Japanese Experiment Module. The United States will be able to use JEM 46 percent of the time, with Canada having the remaining 3 percent access. Power, crew and other station resources needed for experiments will be shared on the basis of 70 percent for the United States, 13 percent each for Japan and Europe and 3 percent for Canada. The same formula will be used to split the common costs of the station's operations, but each partner will be responsible for the cost of maintaining its own hardware.

The views expressed in this report are those of the authors and do not necessarily represent those of the Japan Economic Institute.